

Message

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**From:** Bill Preston [BPreston@css-inc.com]  
**Sent:** 7/30/2020 2:20:44 PM  
**To:** George, Ingrid [George.Ingrid@epa.gov]  
**Subject:** Re: FYI: Buying one more column.  
**Attachments:** PFAS list and gas phase results updated July 28,2020.xlsx

Hi Ingrid,

I've attached a PFAS spreadsheet that shows how I think we could dilute CF<sub>4</sub>, CF<sub>3</sub>H and C<sub>2</sub>F<sub>6</sub> to get to the ranges that we need. I'll call you in a minute.

Best,  
Bill

**Bill Preston**  
Senior Chemist  
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**From:** George, Ingrid <George.Ingrid@epa.gov>  
**Sent:** Thursday, July 30, 2020 10:15 AM  
**To:** Bill Preston <BPreston@css-inc.com>  
**Subject:** RE: FYI: Buying one more column.

Hi Bill,

Maybe we can run the FTOHs on the Entech (I can set up a SIM method)? It would be interesting to figure out how this Gaspro does for MDLs if there's time. Let's chat when you have time.

Thanks,  
Ingrid

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**From:** Bill Preston <BPreston@css-inc.com>  
**Sent:** Thursday, July 30, 2020 9:31 AM  
**To:** George, Ingrid <George.Ingrid@epa.gov>  
**Subject:** Fw: FYI: Buying one more column.

Hi Ingrid,

Jeff is fired up about the light compounds so we're in good shape for now with GasPro in the short term! Thank you for your help last night. I really needed to cancel that order ASAP if it wasn't going to help us.

We need to make up 2 more cans from the CF<sub>4</sub>, CF<sub>3</sub>H and C<sub>2</sub>F<sub>6</sub>. I came up with a strategy last night. We can discuss. I just wanted to give you the good news.

Bill

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**From:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>  
**Sent:** Thursday, July 30, 2020 9:20 AM  
**To:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Cc:** Bill Preston (EPA) <[preston.bill@epa.gov](mailto:preston.bill@epa.gov)>  
**Subject:** RE: FYI: Buying one more column.

I was really excited when I got your previous emails about separation. Turns out that we're making all kinds of PICs on the Rainbow. Now we need to figure out what they are! So your news was really great timing. I'll get with you and Ingrid soon about getting cans prepped and what our target list should be.

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**From:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>  
**Sent:** Thursday, July 30, 2020 9:17 AM  
**To:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Cc:** Preston, Bill <[Preston.Bill@epa.gov](mailto:Preston.Bill@epa.gov)>  
**Subject:** Re: FYI: Buying one more column.

Thanks Jeff. We will continue to optimize with the GasPro here in the short term. Have a good one.  
Bill

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**From:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>  
**Sent:** Thursday, July 30, 2020 9:06:27 AM  
**To:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Cc:** Bill Preston (EPA) <[preston.bill@epa.gov](mailto:preston.bill@epa.gov)>  
**Subject:** RE: FYI: Buying one more column.

Thanks Bill

Let me collect my thoughts about next Rainbow tests – you are definitely headed EXACTLY where we need to go. I'm OK sacrificing the FTOHs, for now anyway. We are super interested in separating as many C1-C3 (or even 4?) per- and poly fluoro hydrocarbons (alkanes/kenes/kynes). So if you end up with peaks you don't have standards for woo hoo! So run scan 1<sup>st</sup>. I think we will be able to give you high enough concentrations.

More to come.

THANKS!!!!!!

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**From:** Bill Preston <[BPreston@css-inc.com](mailto:BPreston@css-inc.com)>  
**Sent:** Thursday, July 30, 2020 9:00 AM  
**To:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>; Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Cc:** Preston, Bill <[Preston.Bill@epa.gov](mailto:Preston.Bill@epa.gov)>  
**Subject:** Re: FYI: Buying one more column.

Thanks Jeff. We will purchase another if we see a good fit but we decided to back off purchasing this last one because it really wouldn't give us an advantage on what we already have with the HP-1 and GasPro.

When are you thinking you will perform your CF4 shakedown tests? I'm thinking that we may or will try to get you a CF4 cal range in the 10-40/500 ppb range (perhaps a quad fit will be needed/maybe linear). Any insight would be helpful.

Thanks again,  
Bill

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**From:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>  
**Sent:** Thursday, July 30, 2020 5:08 AM  
**To:** Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Cc:** Bill Preston (EPA) <[preston.bill@epa.gov](mailto:preston.bill@epa.gov)>  
**Subject:** RE: FYI: Buying one more column.

Go for it!!

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**From:** Singer, Carl <[Singer.Carl@epa.gov](mailto:Singer.Carl@epa.gov)>  
**Sent:** Wednesday, July 29, 2020 7:16 PM  
**To:** Ryan, Jeff <[Ryan.Jeff@epa.gov](mailto:Ryan.Jeff@epa.gov)>  
**Cc:** Preston, Bill <[Preston.Bill@epa.gov](mailto:Preston.Bill@epa.gov)>  
**Subject:** FYI: Buying one more column.

Ingrid and Bill think there is one more column to try to resolve our PFAS. They have probably talked to you about it, but I am just making sure.